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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,537	02/26/2004	Jeroen Wigard	59643.00365	3246

32294 7590 06/12/2006

SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

HERRERA, DIEGO D

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,537	Applicant(s) WIGARD ET AL.	
	Examiner Diego Herrera	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/26/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/26/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 6/3/05; 8/11/05; 10/11/05 were filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Specification

The disclosure is objected to because of the following informalities: paragraph [0006] missing the word 'Mobile' in last sentence. Paragraph [0008] insert 'if' between the words checks and there.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows: Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 37 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. See MPEP 2106 IV B 1(a). On the other hand, a claim to a tangible computer-readable medium encoded with a computer data structure or program is eligible statutory subject matter, i.e. it is one of the four categories of enumerated subject matter, because it is a computer element which defines structural and functional interrelationships between the computer program and

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other components of a computer which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-18, 30-31, 34, & 35-37 rejected under 35 U.S.C. 102(b) as being anticipated by Cheung et al. (streaming agent for wired network/wireless link rate-mismatch environment, icc 2003, 2003 IEEE international conference on communications. IEEE, US, vol. 5 of 5, 9 December 2002, pages 388-391, xp010642591, ISBN: 0-7803-7802-4).

3. Regarding Claim 1, Cheung et al. discloses a method of controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said method comprising the steps of:

- a. Determining if a first link or a second link of a plurality of links is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and
- b. Changing at least one parameter relating to at least one of said first and said second links to change the capacity of said first link or said second link if said at least one of said first and said second links is limiting capacity of the

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connection (paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link).

4. Regarding claim 18, Cheung et al. discloses a method of controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said method comprising the steps of:

c. Determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and

d. Changing at least one parameter relating to at least one of said first and said second links whereby the other of said first and said second links is used to improve the quality of said connection if said one of said first and said second links is limiting capacity (paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality).

5. Regarding claim 30, Cheung et al. discloses a controller for controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said controller comprising:

e. Means for determining if said first link or said second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and

f. Means for causing at least one parameter relating to at least one of said first and said second links to be changed, thereby changing the capacity of said

at least one of said first and said second links, if said first link or said second link is limiting capacity in the connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

6. Regarding claim 31, Cheung et al. discloses a controller for controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said controller comprising:

g. Means for determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and

h. Means for causing at least one parameter relating to at least one of said first and said second links to be changed if said first link or said second link is changing capacity whereby another of said first and second links is used to improve the quality of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

7. Regarding claim 36, Cheung et al. discloses a system comprising:

i. A first entity (network agent); a second entity (wireless link); a third entity (intersection of wired network), wherein a connection is establish-able between said first, second and third entities with a first link provided between the first

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entity and the second entity and a second link provided between said second entity and said third entity (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions); and

j. A controller for controlling the connection comprising the first link and the second link, the controller including; means for determining if said first link or said second link is limiting capacity of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTC is there to control such changes on the parameters controlling streaming flow of congestions); and

k. Changing at least one parameter for relating to at least one of said first and said second links to change the capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection (paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link).

8. Regarding claim 37, Cheung et al. discloses a computer program product comprising software code portions, the software code portions, when executed, control a connection having a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), the software code portions to effect the steps comprising:

- l. Determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and
 - m. Changing at least one parameter relating to at least one of said first and said second links to change capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).
- 9. Consider claim 2, and as applied to claim 1 above, Cheung et al. discloses wherein the changing step comprises changing the at least one parameter relating to said at least one of said first and said second links to increase the capacity of said first link or said second link (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow).
- 10. Consider claim 3, and as applied to claim 1 above, Cheung et al. discloses wherein the changing step comprises changing the at least one parameter relating to another of said first and said second links to improve quality of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

11. Consider claims 4-15, and as applied to claim 1 above, Cheung et al. discloses wherein said changing step comprises changing the at least one parameter that comprises at least one of

n. Bit rate, Error rate, Block error rate, bit error rate, Activity factor at an interface with the at least one said first link or said second link, and Scheduling of users with a given bit rate (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions, one of those parameter being change is the rate of transmission hence bit rate).

12. Consider claim 16, and as applied to claim 1 above, Cheung et al. discloses wherein said determining step comprises determining said first link comprises a radio link (paragraph 1-2.2).

13. Consider claim 17, and as applied to claim 1 above, Cheung et al. discloses wherein said determining step comprises a transport link (paragraph 1-2.2, 3-4.2).

14. Consider claim 34, and as applied to claim 30 above, Cheung et al. discloses wherein said controller (paragraph 2.2) comprises software, said software providing one or more of the following:

o. Means for determining, means for selecting, and means for causing (paragraph 2.2).

15. Consider claim 35, and as applied to claim 30 above, Cheung et al. discloses wherein said controller is provided in a radio network controller (paragraph 1-2.2).

16. Claims 19-29, & 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris et al. (US patent publication 20020146024 A1).

17. Regarding claim 19, Harris et al. discloses a method of selecting a bit rate for a connection comprising a first link and a second link (abstract, title), said method comprising the steps of:

- p. Determining if resources are available in a first link and a second link for a given bit rate (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization);
- q. Selecting a bit rate from a plurality of bit rates for which it is determined in said determining step that resources are available in both said first and said second links; and Using said selected bit rate in said connection (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

18. Regarding claim 29, Harris et al. discloses a method of changing a bit rate for one of a plurality of connections comprising a first link and a second link (abstract, title), said method comprising the steps of:

- r. Selecting a new bit rate for a connection of a plurality of connections (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization);
- s. Determining if resources are available in both said first and second links for said new bit rate; and Selecting said new bit rate for said connection if the

resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

19. Regarding claim 32, Harris et al. discloses a controller for changing a bit rate for one connection of a plurality of connections comprising a first link and a second link (abstract, title), said controller comprising:

t. Means for selecting a new bit rate for said one connection (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and

u. Means for determining if resources are available in both said first and second links for said new bit rate (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and Means for selecting said new bit rate for said connection if said resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

20. Regarding claim 33, Harris et al. discloses a controller for changing a bit rate for one connection of a plurality of connections comprising a first link and a second link (abstract, title), said controller comprising:

v. Means for selecting a new bit rate for said one connection (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and

w. Means for determining if resources are available in both said first and second links for said new bit rate (abstract, fig.1-5, paragraph: [0008]-[0009],

teaches the consideration of data rate between links for transport of information optimization); and Means for selecting said new bit rate for said connection if said resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

21. Consider claim 20, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises performing said determining initially with a minimum bit rate with each successive determining step using a higher bit rate (fig. 3-5, paragraph [0018]-[0021]).

22. Consider claim 21, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises performing said determining step initially with a maximum bit rate with each successive determining step using a lower bit rate (fig. 3 & 4, paragraph [0018]-[0021]).

23. Consider claim 22, and as applied to claim 20 above, Harris et al. discloses wherein said determining step comprises performing said determining step until the bit rate is selected for which resources are available in both said first and said second links (fig. 3, paragraph [0018]-[0021]).

24. Consider claim 23, and as applied to claim 19 above, Harris et al. discloses wherein said selecting step comprises selecting the highest bit rate for which resources are available in both said first and said second links (abstract, title, paragraph: [0008]-[0009], [0018]-[0021], fig. 3-4).

25. Consider claims 24-26, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises determining for said first link if sufficient code

or power or hardware or base band resources are available (fig. 3-5; paragraph [0018]-[0021]).

26. Consider claim 27, and as applied to claim 26 above, Harris et al. discloses wherein said determining and selecting steps comprise determining and selecting for at least two of said plurality of connections (fig. 1-5, abstract, paragraph [0056]-[0060]).

27. Consider claim 28, and as applied to claim 26 above, Harris et al. discloses wherein said determining step for said second link comprises summing the bit rates for said plurality of connections (fig. 3-5, paragraph [0020]-[0021], [0024]-[0036] & [00337]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Choksi (US PATENT 6978144 B1), "method and system for managing real-time bandwidth in a wireless network".
- Hermansson et al. (US PATENT 5987319), "call-setup method in a digital cellular radio communication system".
- Chawin et al. (US PATENT 6459901 B1), "wireless network resource allocation".
- Huusko (US PATENT 6674733 B1), "determining bearer services in a radio access network".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 6:30AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G. Lester can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.H.


NICK CORSARO
PRIMARY EXAMINER